Justification of Need

US 401 is a major north-south corridor in Franklin County, connecting the county seat of Louisburg with other municipalities, such as Raleigh and Warrenton. The facility is a vital artery in moving people and goods through the county and the state.

The facility type and cross-section of US 401 varies within the county. The existing cross-sections of US 401 within the segments are described below.

- Fox Park Road (SR 1700) to south of NC 39, Local ID: FRAN0001-H
 A four lane divided boulevard.
- South of NC 39 to NC 56/581, Local ID: FRAN0001-H A five lane major thoroughfare.
- NC 56/581 to East Noble Street, TIP No. R-3608 A three lane major thoroughfare.
- East Noble Street in Louisburg to Warren County, TIP No. R-3608, Local ID: FRAN0002-H
 A two lane major thoroughfare.

Table 3 below displays the comparisons between the 2006 (or 2005) annual average daily traffic (AADT), the projected 2035 AADT, and the existing capacities of the facility are in vehicles per day (vpd). Since the Louisburg study started in 2006, 2005 AADT counts were used. Since the Franklin County study started in 2007, 2006 AADT counts were used. For comparison, the most current AADT counts have been added to this table.

Table 3 – US 401 Volume and Capacity

| Project | Section (From - To) | 2006 (2005) AADT | 2012 AADT | 2035 AADT | Current Capacity |
|------------|---|------------------------|--------------|--------------|---------------------|
| FRAN0001-H | Louisburg municipal limits - east of Burke Drive | (17,000) | 18,000 | 37,000 | 38,000* |
| FRAN0001-H | East of Burke Drive - NC 39 | (16,000) | 19,000 | 39,600 | 35,900* |
| FRAN0001-H | NC 39 - Tar River | (23,000) | 23,000 | 49,000 | 35,900* |
| FRAN0001-H | Tar River - NC 56/NC 581 | (20,000) | 21,000 | 45,000 | 35,900* |
| FRAN0002-H | Main Street (SR 1229) - Dyking Road (SR 1235) | (11,000) | 10,000 | 31,500 | 7,800* |
| FRAN0002-H | Dyking Road (SR 1235) - north of Moulton Road (SR 1414) | (8,600) | 8,200 | 27,700 | 7,800* |
| FRAN0002-H | North of Moulton Road (SR 1414) - US 401/NC 39 split | 6,400 | 6,700 | 16,000 | 12,000 |
| FRAN0002-H | US 401/NC 39 split - Sutton Road (SR 1413) | 2,900 | 2,800 | 6,000 | 9,100 |
| FRAN0002-H | Sutton Road (SR 1413) - Tollie Road (SR 1401) | 2,900 | 2,800 | 6,000 | 10,600 |
| FRAN0002-H | Tollie Road (SR 1401) - Cheek's Quarter Road (SR 1405) | 1,500 | 1,600 | 3,000 | 10,600 |
| FRAN0002-H | Cheek's Quarter Road (SR 1405) - Warren County | 1,600 | 1,400 | 3,000 | 10,600 |

* LOS C – Capacities